

Linzer biol. Beitr.	48/1	487-493	30.07.2016
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**Notes on Pimplinae (Hymenoptera: Ichneumonidae)  
from Mauritius**

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**A b s t r a c t :** Currently the subfamily Pimplinae is represented by five species in Mauritius. *Itoplectis albipes* SEYRIG, 1932 and *Xanthophenax xanthomelas* (BRULLÉ, 1846) are reported as first records from Mauritius.

**Key words :** *Echthromorpha*, *Itoplectis*, *Xanthophenax*, *Xanthopimpla*, new records.

**Introduction**

Hitherto 22 species of the family Ichneumonidae have been recorded from Mauritius (YU & HORSTMANN 1997a, b, Madl, unpublished catalogue), of which several species have been introduced for biological control (WILLIAMS & GANESHAN 2000). The ichneumonid fauna is still poorly investigated compared with the neighbouring island Réunion. ROUSSE & VILLEMANT (2012) recorded 65 species from the latter, but this list is still incomplete. YU & HORSTMANN (1997a, b) catalogued only four species from Rodrigues.

Till now only three species of the large subfamily Pimplinae have been recorded from Mauritius: *Echthromorpha spinator* (FABRICIUS, 1798), *Xanthopimpla citrina* (HOLMGREN, 1868) and *Xanthopimpla stemmator* (THUNBERG, 1822) (GANESHAN & WILLIAMS 2001).

This study is based on the material of the Mauritius Sugarcane Industry Research Institute (MSIRI) at Réduit (Mauritius) and the Naturhistorisches Museum Wien (NHMW) at Vienna (Austria). It contains five species, of which *Itoplectis albipes* SEYRIG, 1932 and *Xanthophenax xanthomelas* (BRULLÉ, 1846) are first records for the fauna of Mauritius. Currently five species of Pimplinae are known from Mauritius and seven species from Réunion (ROUSSE & VILLEMANT 2012). The subfamily Pimplinae is apparently absent from Rodrigues.

**Abbreviations**

biol. ....biology  
cat.....catalogue  
descr..... description  
distr. ....distribution  
fig.(s)..... figure(s)

MSIRI .....Mauritius Sugarcane Industry Research Institute  
 NHMW .....Naturhistorisches Museum Wien  
 tab. .... table  
 tax. .... taxonomy

## Taxonomy and faunistics

### *Echthromorpha spinator* (FABRICIUS, 1798)

*Echthromorpha spinator* (FABRICIUS, 1798): MADL 2012: 1208 (key), 1210 (tax., biol., distr.).

H o s t s : *Nagia megaruna* JOANNIS, 1932, *Simplicia extinctalis* (ZELLER, 1852) (Lepidoptera: Noctuidae) – *Omiodes indicata* (FABRICIUS, 1775) (Lepidoptera: Crambidae).

M a t e r i a l   e x a m i n e d : Belle Rive – L'Etoile, cross La Commune 1 ♀ 17.12.2006 leg. M. Madl (NHMW).

N o t e s : *Echthromorpha spinator* is an endemic species of the Mascarenes. It is also known from Réunion. The references concerning Mauritius are listed in MADL (2012).

### *Itopectis albipes* SEYRIG, 1932

M a t e r i a l   e x a m i n e d : Black River Gorges NP: Bel Ombre Trail, plateau 1 ♂ 23.10.2004 leg. M. Madl (NHMW) – Deux Mamelles 4 ♂ ♂ 1 ♀ 09.-18.12.2006 leg. M. Madl (NHMW) – La Nicolière Reservoir, near car park 1 ♂ 27.11.2005 leg. M. Madl (NHMW).

N o t e s : First record. *Itopectis albipes*, which is an endemic species of the Malagasy subregion, is also known from Madagascar and Réunion (ROUSSE & VILLEMANT 2012). There are no host records.

### *Xanthophenax xanthomelas* (BRULLÉ, 1846)

M a t e r i a l   e x a m i n e d : Black River Gorges National Park: Bel Ombre Trail, plateau 1 ♀ 23.10.2004 leg. M. Madl (NHMW).

N o t e s : First record. *Xanthophenax xanthomelas*, which has been described from Réunion, is an endemic species of the Mascarenes (ROUSSE & VILLEMANT 2012). We have not seen specimens of *Xanthophenax* sp., which is mentioned as parasitoid of *Cryptophlebia ? semilunana* (SAALMÜLLER, 1880) (Lepidoptera: Tortricidae) in WILLIAMS (1958: 110), in the collection of the MSIRI.

### *Xanthopimpla citrina* (HOLMGREN, 1858)

*Pimpla citrina* nov.sp.: HOLMGREN 1868: 404 (descr. ♂ ♀).

*Pimpla citrina* HOLMGREN, 1868: KRIEGER 1899: 65 (tax.).

*Xanthopimpla citrina* (HOLMGREN, 1868): DE DALLA TORRE 1901: 457 (tax., world cat.).

*Xanthopimpla ? citrina* (HOLMGREN, 1868): SCHMIEDEKNECHT 1907: 40 (tax., world cat.).

*Xanthopimpla citrina* (HOLMGREN, 1868): ROMAN 1910: 196 (tax., distr.).

*Xanthopimpla citrina* (HOLMGREN, 1868): KRIEGER 1915: 19 (distr.).

*Xanthopimpla citrina* (HOLMGREN, 1868): SEYRIG 1932: 85 (key, tax., distr.).

*Xanthopimpla citrina* (HOLMGREN, 1868): MOUTIA 1946 (In: ANONYMOUS): 18 (biol.), 19 (biol.).

*Xanthopimpla citrina* (HOLMGREN, 1868): MOUTIA 1947 (In: ANONYMOUS): 16 (biol., distr.).

*Xanthopimpla citrina* (HOLMGREN, 1868): MOUTIA & MAMET 1947: 29 (cat. Mauritius)

- Xanthopimpla citrina* (HOLMGREN, 1868): MOUTIA 1949b: 210 (biol., distr.).
- Xanthopimpla citrina* (HOLMGREN, 1868): MOUTIA & COURTOIS 1952: 351 (figs. 7a-u), 352 (tax., biol., distr.), 354 (tab. 16: biol.), 356 (tab. 18: biol.).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS & MAMET 1954: 4 (host parasite cat. Mauritius), 5 (host parasite cat. Mauritius).
- Xanthopimpla citrina* (HOLMGREN, 1868): MOUTIA 1957a: 129 (biol., distr.).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS 1958: 110 (cat. Mauritius).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS 1961: 68 (fig. 36: biol.).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS & MAMET 1962: 7 (host parasite cat. Mauritius), 9 (host parasite cat. Mauritius).
- Xanthopimpla citrina* (HOLMGREN, 1868): TOWNES & CHIU 1970: 117 (tax.).
- Xanthopimpla citrina* (HOLMGREN, 1868): TOWNES & TOWNES 1973: 39 (cat. Afrotropical region).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS 1974: 2 (host parasite cat. Mauritius).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS 1978: 7 (host parasite cat. Mauritius), 9 (host parasite cat. Mauritius).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS 1980: 2 (host parasite cat. Mauritius).
- Xanthopimpla citrina* (HOLMGREN, 1868): WILLIAMS 1983: 11 (host parasite cat. Mauritius), 13 (biol.).
- Xanthopimpla citrina* (HOLMGREN, 1868): YU & HORSTMANN 1997b: 847 (world cat.).
- Xanthopimpla citrina* (HOLMGREN, 1868): GANESHAN & WILLIAMS 2001: 2 (host parasite cat. Mauritius).
- Xanthopimpla citrina* (HOLMGREN, 1868): GANESHAN 2001: 23 (host parasite cat. Mauritius), 27 (host parasite cat. Mauritius).
- Hosts:** *Chilo sacchariphagus* (BOJER, 1856), *Omiodes indicata* (FABRICIUS, 1775) (Lepidoptera: Crambidae) – *Sesamia calamistis* HAMPSON, 1910 (Lepidoptera: Noctuidae).
- Material examined:** Balaclava 3 ♂ 06.12.2006 leg. M. Madl (NHMW) – Colmar 1 ♀ 20.01.1939 leg. W.F. Jepson (MSIRI) – Union Flacq 1 ♂ 30.04.1958 leg. A. Rajabalee (MSIRI).
- Notes:** *Xanthopimpla citrina* is also known from the Afrotropical region (YU & HORSTMANN 1997b).

### ***Xanthopimpla stemmator* (THUNBERG, 1822)**

- Xanthopimpla stemmator* (THUNBERG, 1822): JEPSON 1941 (In: ANONYMOUS 1941a): 19 (list of importations).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1941 (In: ANONYMOUS 1941b): 19 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1941b: 204 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): VINSON 1942: 56 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1942 (In: ANONYMOUS): 17 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1943a (In: ANONYMOUS): 15 (distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1943b: 394 (distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1945a: 338 (distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1945 (In: ANONYMOUS): 15 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1946 (In: ANONYMOUS): 18 (biol.), 19 (biol.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA & MAMET 1947: 29 (cat. Mauritius).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1947 (In: ANONYMOUS): 16 (distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1949a: 1 (distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1949b: 210 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA & COURTOIS 1952: 355 (biol., distr., tab. 17: biol.), 356 (tab. 18: biol.).

- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS & MAMET 1954: 4 (cat.), 5 (host-parasite cat. Mauritius).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1957a: 129 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): MOUTIA 1957b: 258 (tab. 3: biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS 1958: 110 (cat. Mauritius)
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS 1961: 68 (fig. 36: biol.).
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS & MAMET 1962: 7 (host parasite cat. Mauritius), 9 (host parasite cat. Mauritius).
- Xanthopimpla stemmator* (THUNBERG, 1822): TOWNES & CHIU 1970: 103 (key), 108 (descr., distr.), 311 (fig. 57), 331 (fig. 206), 362 (fig. 446).
- Xanthopimpla stemmator* (THUNBERG, 1822): TOWNES & TOWNES 1973: 44 (cat. Afrotropical region).
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS 1974: 2 (host parasite cat. Mauritius).
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS 1978: 7 (host parasite cat. Mauritius), 9 (host parasite cat. Mauritius).
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS 1980: 2 (host parasite cat. Mauritius);
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS 1983: fig. 5, 11 (host parasite cat.), 13 (biol., distr.), 21 (tab. 3: biol.).
- Xanthopimpla stemmator* (THUNBERG, 1822): GANESHAN & RAJABALEE 1997: 89 (biol., distr.).
- Xanthopimpla stemmator* (THUNBERG, 1822): YU & HORSTMANN 1997b: 854 (world cat.).
- Xanthopimpla stemmator* (THUNBERG, 1822): WILLIAMS & GANESHAN 2000: 35 (cat. introduced insects Mauritius), 42 (biol.).
- Xanthopimpla stemmator* (THUNBERG, 1822): GANESHAN & WILLIAMS 2001: 2 (host parasite cat. Mauritius).
- Xanthopimpla stemmator* (THUNBERG 1822): GANESHAN 2001: 23 (host parasite cat. Mauritius), 24 (fig. below), 27 (host parasite cat. Mauritius).
- H o s t s :** *Chilo sacchariphagus* (BOJER, 1856) (Lepidoptera: Crambidae);  
*Cryptophlebia semilunana* (SAALMÜLLER, 1880) (Lepidoptera: Tortricidae) –  
*Sesamia calamistis* HAMPSON, 1910 (Lepidoptera: Noctuidae).
- M a t e r i a l e x a m i n e d :** Beau Champ 5 ♀ ♀ 01.03. 1984 leg. A. Rajabalee (MSIRI) – Belle Vue 7 ♂ ♂ May 1986 leg. A. Rajabalee (MSIRI); 5 ♂ ♂ July 1986 leg. J.R. Williams (MSIRI) – Deux Mamelles, 8 ♂ ♂ 4 ♀ ♀ 09.-18.12.2006 leg. M. Madl (NHMW) – Riche en Eau, affluent of Rivière La Choux 1 ♂ 1 ♀ 07.12.2006 leg. M. Madl (NHMW).

**N o t e s :** *Xanthopimpla stemmator*, which is widely distributed in the Australian and Oriental regions (YU & HORSTMANN 1997), has been successfully introduced for biological control of *Chilo sacchariphagus* from Sri Lanka in 1939 (WILLIAMS & GANESHAN 2000: 42).

### Acknowledgements

We are indebted to Manula Vizek (Naturhistorisches Museum Wien, Austria), who kindly supported this study in various ways.

### Zusammenfassung

Die Unterfamilie Pimplinae ist auf Mauritius zur Zeit mit fünf Arten nachgewiesen. *Itopectis albipes* SEYRIG, 1932 und *Xanthophenax xanthomelas* (BRULLÉ, 1846) werden erstmals von Mauritius gemeldet.

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